



## INFORMATION DISCLOSURE CITATION

Attorney Docket No.: GC840	Serial No.: 10/591,681
Applicant: HARDING	
Filing Date: September 5, 2006	Group: Not yet assigned
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## US PATENT DOCUMENTS

Examiner's Initial	Document Number	Date	Name	Class	Sub-Class	Filing Date
A1	4,261,868	04-14-81	Hora et al.	252	529	08-08-79
A2	4,404,128	09-13-83	Anderson	252	546	05-29-81
A3	4,533,359	08-06-85	Kondo et al.	8	128 R	11-05-82
A4	4,760,025	07-26-88	Estell et al.	435	222	05-29-84
A5	5,185,258	02-09-93	Caldwell et al.	435	220	10-19-90
A6	5,204,015	04-20-93	Caldwell et al.	252	174.12	10-09-92
A7	6,218,165 B1	04-17-01	Estell et al.	435	221	02-23-99

## FOREIGN PATENT DOCUMENTS

Examiner's Initials	Document Number	Date	Country	Class	Sub-Class	Translation Yes/No
B1	0 134 267 B1	20.03.85	EPO			
B2	WO 89/06279	13.07.89	PCT			
B3	WO 02/40997 A2	23.05.02	PCT			
B4	WO 03/042656 A2	22.05.03	PCT			
B5	WO 03/073068 A2	04.09.03	PCT			
B6	WO 03/072746 A2	04.09.03	PCT			

## OTHER DOCUMENTS

Examiner's Initials	Author, Title, Date, Pertinent Pages, etc.
C1	Alexander, J. et al. "The Optimization of Helper T Lymphocyte (HTL) Function in Vaccine Development," <i>Immunologic Research</i> , 18(2):79-92 (1998).
C2	Altschul, S. et al. "Basic Local Alignment Search Tool," <i>J. Mol. Biol.</i> , 215:403-410 (1990).
C3	Altschul, S. et al. "Local Alignment Statistics," <i>Methods in Enzymology</i> , 266:460-480 (1996).
C4	Altuvia, Y. et al. "Ranking Potential Binding Peptides to MHC Molecules by a Computational Threading Approach," <i>J. Mol. Biol.</i> , 249:244-250 (1995).

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## **OTHER DOCUMENTS**

<b>Examiner's Initials</b>	<b>Author, Title, Date, Pertinent Pages, etc.</b>
C5	Asai, T. et al., "Evaluation of the Modified ELISPOT Assay for Gamma Interferon Production in Cancer Patients Receiving Antitumor Vaccines," <i>Clinical and Diagnostic Laboratory Immunology</i> , 7(2):145-154 (2000).
C6	Asquith, B. et al., "Lymphocyte Kinetics: The Interpretation of Labelling Data," <i>TRENDS in Immunology</i> , 23(12):596-601 (2002).
C7	Berzofsky, J. et al., "Epitope Selection and Design of Synthetic Vaccines. Molecular Approaches to Enhancing Immunogenicity and Cross-Reactivity of Engineered Vaccines," <i>Ann. NY Acad. Sci.</i> , 690:256-264 (1993).
C8	Black, K. et al., "HLA-DQ Determines the Response to Exogenous Wheat Proteins: A Model of Gluten Sensitivity in Transgenic Knockout Mice <sup>1</sup> ," <i>The Journal of Immunology</i> , 169:5595-5600 (2002).
C9	Blaikie, L. et al., "Strain Variation in the IgG1 Antibody Response to Proteins Administered Intranasally in the Mouse," <i>Food and Chemical Toxicology</i> , 37:897-904 (1999).
C10	Blaikie, L. et al., "Experience with a Mouse Intranasal Test for the Predictive Identification of Respiratory Sensitization Potential of Proteins," <i>Food and Chemical Toxicology</i> , 37:889-896 (1999).
C11	Boyton, R. et al., "Transgenic Models of Autoimmune Disease," <i>Clin. Exp. Immunol.</i> , 127:4-11 (2002).
C12	Casadevall, N. et al., "Pure Red-Cell Aplasia and Antierythropoietin Antibodies in Patients Treated with Recombinant Erythropoietin," <i>The New England Journal of Medicine</i> , 346(7):469-475 (2002).
C13	Das, P. et al., "HLA Transgenic Mice as Models of Human Autoimmune Diseases," <i>Rev. Immunogenetics</i> , 2:105-114 (2000).
C14	Devereux, J. et al., "A Comprehensive Set of Sequence Analysis Programs for the VAX," <i>Nucleic Acids Research</i> , 12(1):387-395 (1984).
C15	Doolan, D. et al., "HLA-DR-Promiscuous T Cell Epitopes from <i>Plasmodium falciparum</i> Pre-Erythrocytic-Stage Antigens Restricted by Multiple HLA Class II Alleles <sup>1,2</sup> ," <i>The Journal of Immunology</i> , 165:1123-1137 (2000).
C16	Farrar, J. et al., "Selective Loss of Type I Interferon-Induced STAT4 Activation Caused by a Minisatellite Insertion in Mouse Stat2," <i>Nature Immunology</i> , 1(1):65-69 (2000).
C17	Feng, Da-Fei et al., "Progressive Sequence Alignment as a Prerequisite to Correct Phylogenetic Trees," <i>Journal of Molecular Evolution</i> , 25:351-360 (1987).
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<b>Examiner's Initials</b>	<b>Author, Title, Date, Pertinent Pages, etc.</b>
C18	Ford, D. et al., "Sensitization of Human Lymphocytes In Vitro Kinetics and Specificity of the Response to Hemocyanins," <i>Human Immunology</i> , 4:197-208 (1982).
C19	Guéry, Jean-Charles et al., "Constitutive Presentation of Dominant Epitopes from Endogenous Naturally Processed Self-β2-Microglobulin to Class II-Restricted T Cells Leads to Self-Tolerance <sup>1</sup> ," <i>The Journal of Immunology</i> , 154:545-554 (1995).
C20	Harding, F., "CD4 <sup>+</sup> Cell Epitope Identification: Applications to Allergy," <i>Clin. Exp. Allergy</i> , 33:557-565 (2003).
C21	Henikoff, S. et al., "Amino Acid Substitution Matrices from Protein Blocks," <i>Proc. Natl. Acad. Sci. USA</i> , 89:10915-10919 (1992).
C22	Herman, A. et al., "Determination of Glutamic Acid Decarboxylase 65 Peptides Presented by the Type I Diabetes-Associated HLA-DQ8 Class II Molecule Identifies an Immunogenic Peptide Motif <sup>1</sup> ," <i>The Journal of Immunology</i> , 163:6275-6282 (1999).
C23	Hesse, M. et al., "A T Cell Clone's Avidity is a Function of its Activation State <sup>1</sup> ," <i>The Journal of Immunology</i> , 167:1353-1361 (2001).
C24	Higgins, D. et al., "Fast and Sensitive Multiple Sequence Alignments on a Microcomputer," <i>CABIOS COMMUNICATIONS</i> , 5(2):151-153 (1989).
C25	Imamura, O. et al., "Cloning and Characterization of a Human DEAH-box RNA Helicase, a Functional Homolog of Fission Yeast Cdc28/Prp8," <i>Nucleic Acids Research</i> , 26(9):2063-2068 (1998).
C26	Jones, K. et al., "Polyclonal <i>in vitro</i> Proliferative Responses from Nonimmune Donors to <i>Plasmodium falciparum</i> Malaria Antigens Require UCHL1 <sup>+</sup> (memory) T Cells," <i>Eur. J. Immunol.</i> , 20:307-315 (1990).
C27	Karlin, S. et al., "Applications and Statistics for Multiple High-Scoring Segments in Molecular Sequences," <i>Proc. Natl. Acad. Sci. USA</i> , 90:5873-5877 (1993).
C28	Keilholz, U. et al., "Immunologic Monitoring of Cancer Vaccine Therapy: Results of a Workshop Sponsored by the Society for Biological Therapy," <i>Journal of Immunotherapy</i> , 25(2):97-138 (2002).
C29	Kim, B. et al., "Constraints in Antigen Processing Result in Unresponsiveness to a T Cell Epitope of Hen Egg Lysozyme in C57BL/6 Mice," <i>Eur. J. Immunol.</i> , 22:775-782 (1992).
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<b>Examiner's Initials</b>	<b>Author, Title, Date, Pertinent Pages, etc.</b>
C30	Kimber, I. et al., "WORKSHOP OVERVIEW. Identification of Respiratory Allergens <sup>1,2</sup> ," <i>Fundamental and Applied Toxicology</i> , 33:1-10 (1996).
C31	Kimber, I. et al., "FORUM. Toxicology of Protein Allergenicity: Prediction and Characterization," <i>Toxicological Sciences</i> , 48:157-162 (1999).
C32	Krco, C. et al., "Identification of T Cell Determinants on Human Type II Collagen Recognized by HLA-DQ8 and HLA-DQ6 Transgenic Mice <sup>1</sup> ," <i>The Journal of Immunology</i> , 163:1661-1665 (1999).
C33	Kuhns, M. et al., "Cytotoxic T Lymphocyte Antigen-4 (CTLA-4) Regulates the Size, Reactivity, and Function of a Primed Pool of CD4 <sup>+</sup> T Cells," <i>Proc. Natl. Acad. Sci. USA</i> , 97(23):12711-12716 (2000).
C34	Li, J. et al., "Thrombocytopenia Caused by the Development of Antibodies to Thrombopoietin," <i>Blood</i> , 98(12):3241-3248 (2001).
C35	Maeji, N. et al., "Multi-pin Peptide Synthesis Strategy for T Cell Determinant Analysis," <i>Journal of Immunological Methods</i> , 134:23-33 (1990).
C36	Manici, S. et al., "Melanoma Cells Present a MAGE-3 Epitope to CD4 <sup>+</sup> Cytotoxic T Cells in Association with Histocompatibility Leukocyte Antigen DR11," <i>J. Exp. Med.</i> , 189(5):871-876 (1999).
C37	Matthies, W. H., "Allergies by Detergents and Cleansing Products: Facts and Figures," <i>Tenside Surf. Det.</i> , 34:450-454 (1997).
C38	Melton, R. et al., "Antibody-Enzyme Conjugates for Cancer Therapy," <i>J. Natl. Cancer Inst.</i> , 88:153-165 (1996).
C39	Mori, M. et al., "HLA Gene and Haplotype Frequencies in the North American Population: The National Marrow Donor Program Donor Registry <sup>1</sup> ," <i>Transplantation</i> , 64(7):1017-1027 (1997).
C40	Muraro, P. et al., "Human Autoreactive CD4 <sup>+</sup> T Cells from Naïve CD45RA <sup>+</sup> and Memory CD45RO <sup>+</sup> Subsets Differ with Respect to Epitope Specificity and Functional Antigen Avidity," <i>The journal of Immunology</i> , 164:5474-5481 (2000).
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C41	Needleman, S. et al., "A General Method Applicable to the Search for Similarities in the Amino Acid Sequence of Two Proteins," <i>J. Mol. Biol.</i> , 48:443-453 (1970).
C42	Novitsky, V. et al., "Magnitude and Frequency of Cytotoxic T-Lymphocyte Responses: Identification of Immunodominant Regions of Human Immunodeficiency Virus Type 1 Subtype C," <i>Journal of Virology</i> , 76(20):10155-10168 (2002).
C43	Olsson, P. et al., "Antigenicity of Mouse Monoclonal Antibodies. A Study on the Variable Region of the Heavy Chain," <i>J. Theor. Biol.</i> , 151:111-122 (1991).
C44	Pathan, A. et al., "Direct Ex Vivo Analysis of Antigen-Specific IFN- $\gamma$ -Secreting CD4 T Cells in <i>Mycobacterium tuberculosis</i> -Infected Individuals: Associations with Clinical Disease State and Effect of Treatment <sup>1</sup> ," <i>The Journal of Immunology</i> , 167:5217-5225 (2001).
C45	Pearson, W. et al., "Improved Tools for Biological Sequence Comparison," <i>Proc. Natl. Acad. Sci. USA</i> , 85:2444-2448 (1988).
C46	Pepys, J. et al., "Clinical and Immunological Responses to Enzymes of <i>Bacillus subtilis</i> in Factory Workers and Consumers," <i>Clinical Allergy</i> , 3:143-160 (1973).
C47	Plebanski, M. et al., "In vitro Primary Responses of Human T Cells to Soluble Protein Antigens," <i>Journal of Immunological Methods</i> , 170:15-25 (1994).
C48	Rachmilewitz, J. et al., "A Temporal and Spatial Summation Model for T-Cell Activation: Signal Integration and Antigen Decoding," <i>TRENDS in Immunology</i> , 23(12):592-595 (2002).
C49	Raju, R. et al., "Cryptic Determinants and Promiscuous Sequences on Human Acetylcholine Receptor: HLA-Dependent Dichotomy in T-Cell Function," <i>Human Immunology</i> , 63:237-247 (2002).
C50	Rammensee, Hans-Georg et al., "SYFPEITHI: Database for MHC Ligands and Peptide Motifs," <i>Immunogenetics</i> , 50:213-219 (1999).
C51	Robinson, M. et al., "Use of the Mouse Intranasal Test (MINT) to Determine the Allergenic Potency of Detergent Enzymes: Comparison to the Guinea Pig Intratracheal (GPIT) Test <sup>1</sup> ," <i>Toxicological Sciences</i> , 43:39-46 (1998).
C52	Sarlo, K. et al., "Respiratory Allergenicity of Detergent Enzymes in the Guinea Pig Intratracheal Test: Association with Sensitization of Occupationally Exposed Individuals <sup>1</sup> ," <i>Fundamental and Applied Toxicology</i> , 39:44-52 (1997).
C53	Sarlo, K. et al., Occupational Asthma and Allergy in the Detergent Industry: New Developments," <i>Current Opinion in Allergy and Clinical Immunology</i> , 2:97-101 (2002).

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C54	Scagnolari, C. et al., "Neutralizing and Binding Antibodies to IFN- $\beta$ : Relative Frequency in Relapsing-Remitting Multiple Sclerosis Patients Treated with Different IFN- $\beta$ Preparations," <i>Journal of Interferon and Cytokine Research</i> , 22:207-213 (2002).
C55	Schweigert, M. et al., "Occupational Asthma and Allergy Associated with the Use of Enzymes in the Detergent Industry – a Review of the Epidemiology, Toxicology and Methods of Prevention," <i>Clinical and Experimental Allergy</i> , 30:1511-1518 (2000).
C56	Sicherer, S. et al., "Peanut and Tree Nut Allergy," <i>Current Opinion in Pediatrics</i> , 12:567-573 (2000).
C57	Smith, T. et al., "Comparison of Biosequences," <i>Advances in Applied Mathematics</i> , 2:482:489 (1981).
C58	Southwood, S. et al., "Several Common HLA-DR Types Share Largely Overlapping Peptide Binding Repertoires <sup>1,2</sup> ," <i>The Journal of Immunology</i> , 160:3363-3373 (1998).
C59	Stickler, M. et al., "CD4 <sup>+</sup> T-Cell Epitope Determination Using Unexposed Human Donor Peripheral Blood Mononuclear Cells," <i>Journal of Immunotherapy</i> , 23(6):654-660 (2000).
C60	Stickler, M. et al., "A Human Dendritic Cell-Based Method to Identify CD4 <sup>+</sup> T-Cell Epitopes in Potential Protein Allergens," <i>Environmental Health Perspectives</i> , 111(2):251-254 (2003).
C61	Stickler, M. et al., "Human Population-based Identification of CD4 <sup>+</sup> T-Cell Peptide Epitope Determinants," <i>Journal of Immunological Methods</i> , 281:95-108 (2003).
C62	Stickler, M. et al., "An <i>In Vitro</i> Human Cell-Based Assay to Rank the Relative Immunogenicity of Proteins," <i>Toxicological Sciences</i> , 77:280-289 (2004).
C63	Sturniolo, T. et al., "Generation of Tissue-Specific and Promiscuous HLA Ligand Databases Using DNA Microarrays and Virtual HLA Class II Matrices," <i>Nature Biotechnology</i> , 17:555-561 (1999).
C64	Vanderlugt, C. et al., "Pathologic Role and Temporal Appearance of Newly Emerging Autoepitopes in Relapsing Experimental Autoimmune Encephalomyelitis <sup>1</sup> ," <i>The Journal of Immunology</i> , 164:670-678 (2000).
C65	Vanderlugt, C. et al., "Epitope Spreading in Immune-Mediated Diseases: Implications for Immunotherapy," <i>Nature Reviews</i> , 2:85-95 (2002).
C66	Viola, A. et al., "T Cell Activation Determined by T Cell Receptor Number and Tunable Thresholds," <i>Science</i> , 273:104-106 (1996).

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C67	Warmerdam, P. et al., "Staphylokinase-Specific Cell-Mediated Immunity in Humans <sup>1</sup> ," <i>The Journal of Immunology</i> , 168:155-161 (2002).
C68	Yin, D. et al., "Induction of Species-Specific Host Accommodation in the Hamster-to-Rat Xenotransplantation Model <sup>1</sup> ," <i>The Journal of Immunology</i> , 161:2044-2051 (1998).
C69	Young, J. et al., "In vitro Proliferative Responses of Human Peripheral Blood Mononuclear Cells to Non-recall Antigens," <i>Journal of Immunological Methods</i> , 182:177-184 (1995).
C70	Yu, K. et al., "Methods for Prediction of Peptide Binding to MHC Molecules: A Comparative Study," <i>Molecular Medicine</i> , 8(3):137-148 (2002).
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